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~~FILE~~ D.J. HANSEN

UNION CARBIDE CORPORATION  
LINDE DIVISION  
RESEARCH & DEVELOPMENT  
ANALYTICAL SERVICES  
TONAWANDA, NEW YORK 14150

TEST REPORT

Test No R86001 Date 4/14/86  
Requested by D.J. Hansen Sample Received From Strategic Minerals Corp.  
Date Requested 3/10/86 Date Received 3/10/86  
Subject Radiation Survey and Assays - Furnace and V-AL Areas

Test Data Two areas at Strategic Minerals Corp. (formerly IMETCO) were suspected to contain low level radioactive material. These are the old furnace area and the V-AL area in Building 24. Survey and assay assistance was requested. Two separate visits were made in order to survey the areas, and on both occasions samples of loose material were removed for radioassay at Tonawanda. Between the first and second visits extensive removal operations were undertaken, in order to determine if the low-level radioactive material could be completely removed.

Surveys

On the date of the first visit (March 10, 1986) surveys revealed a number of "hot spots" in both areas where radiation levels at or near the surface were several times background levels. The same areas were re-surveyed on March 21, 1986. In the interim a large amount of the loose material in both areas had been removed and placed in 55 gallon waste drums, pending disposal. The second surveys indicated radioactive material remained. In the furnace area readings as high as 0.1 mR/hr were seen. This is slightly above background (0.02-0.07 mR/hr). In the V-AL section readings up to 0.2 mR/hr were observed, at a depth of approximately 2 feet.

Radioassays

<u>Sample</u>	<u>Date</u>	<u>Activity</u>	
		<u><math>\alpha</math>, pCi/g</u>	<u><math>\alpha\beta\gamma</math>, <math>\mu</math> Ci/g</u>
Furnace Base	3/10	14.6	.0097
Furnace Chunk	3/10	8.6	.0060
Passageway Front	3/10	48	.0230
Furnace Base North	3/21	14.5	.0060
Passageway Front	3/21	5.3	.0024
Passageway Back	3/21	8.0	.0029
V-AL Bldg. 24	3/21	10.9	.0040

Reported by *W.D. Smith*  
W.D. Smith

Tested by W.D. Smith

Approved by *J.B. Goddard*  
J.B. Goddard

Copies to J.B. Goddard-W.D. Smith-file

UCCNHT0000429

#### REMARKS

1. It is apparent that the digging and removal operations did not totally remove all of the low-level material. More extensive removals will be necessary, although it is uncertain exactly how much.
2. For disposal purposes, an identification of the radioisotopes present in the samples will be necessary.
3. The above-background radiation levels detected in some areas do not constitute an occupational exposure hazard.